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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,791	08/31/2001	Semir S. Haddad	01-S-018 (STMI01-00018)	1058

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EXAMINER	
DUNN, MISHAWN N	

ART UNIT	PAPER NUMBER
2621	

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/943,791	HADDAD ET AL.	
	Examiner	Art Unit	
	Mishawn N. Dunn	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *19-21* is/are allowed.

6)☒ Claim(s) *1-18,22 and 23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 8-9, filed March 20, 2006, with respect to the rejection(s) of claim(s) 1 and 10 under 35 USC § 102 have been fully considered and are persuasive. Upon further consideration, a new ground(s) of rejection is made in view of different interpretation of the previously applied reference. Geer et al. teaches that the video data is first buffered in DRAM, then written to the mass storage unit. However, the Applicant has pointed out that the circular buffers need to on the storage disk. Therefore, the rejection has been withdrawn

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 10, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geer et al. (US Pat. No. 6,788,882) in view of Parry et al. (US Pat. No. 6,378,035).

4. Consider claim 1. Geer et al. teaches an apparatus for performing time-shifted viewing of an incoming television program (col. 9, lines 8-27; fig. 12) being received by said digital video recorder (fig. 1), the apparatus comprising: a controller (inherent, must have a controller in order to allow the CPU to communicate with the DRAM) capable of

creating a data file (col. 9, lines 1-47) having a defined maximum size of said digital video recorder (col. 7, lines 36-48) and capable of causing video data associated with said incoming television program to be stored sequentially in said data file from a first location to an Nth location, wherein said controller, in response to a determination that said video data has been stored in said Nth location, causes a next received video data to be stored in said first location (col. 12, lines 42-67; fig. 3).

Geer et al. does not disclose that the circular buffers are stored on a mass storage device. However, Parry et al. teaches that a circular buffer can be stored in volatile or non-volatile memory (col. 8, lines 27-30).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, to use a storage disk as a choice of design

5. Consider claim 10. Geer et al. teaches a digital video recorder capable of time-shifted viewing of an incoming television program (col. 9, lines 8-27; fig. 12) being received by said digital video recorder (fig. 1), said digital video recorder comprising: a video processor capable of receiving said incoming television program and converting said incoming television program to a baseband video signal capable of being displayed on a television set coupled to said digital video recorder (col. 6, line 49 – col. 7, line 14; fig. 1); storing said incoming television program (fig. 1); and a controller (inherent, must have a controller in order to allow the CPU to communicate with the DRAM) capable of creating a data file (col. 9, lines 1-47) having a defined maximum size (col. 7, lines 36-48) and capable of causing video data associated with said incoming television program to be stored sequentially in said data file from a first location to an Nth location, wherein

said controller, in response to a determination that said video data has been stored in said Nth location, causes a next received video data to be stored in said first location(col. 12, lines 42-67; fig. 3).

Geer et al. does not disclose that the incoming television program is stored on a storage disk. However, Parry et al. teaches that a circular buffer can be stored in volatile or non-volatile memory (col. 8, lines 27-30).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, to use a storage disk as a choice of design.

6. Consider claim 22. Geer et al. teaches all the claimed limitations as stated above, except that the storage disk comprises a persistent storage disk.

However, Parry et al. teaches that the storage disk can be RAM, hard disk, floppy disk, or optical disk (col. 8, lines 27-30).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, to use a persistent storage disk as a choice of design.

7. Consider claim 23. Geer et al. teaches that the controller is capable of storing the defined maximum size in a data field associated with the data file (col. 12, lines 49-54; figs. 4-5).

8. Claims 2-9 and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geer et al. (US Pat. No. 6,788,882) in view of Parry et al. (US Pat. No. 6,378,035) in further view of Shen et al. (US Pat. No. 6,434,748).

9. Consider claims 2 and 3. Geer et al. discloses all of the claimed limitations as stated above, except a controller that updates a write pointer each time said video data is stored.

However, Shen et al. teaches a controller that updates a write pointer each time said video data is stored sequentially in said data file from said first location to said Nth location (col. 6, lines 32-34; fig. 5).

Although, Geer et al. does not distinctly disclose a write pointer, an artisan with ordinary skill in the art would readily recognize that in order to provide a data storage unit that concurrently and continuously stores a plurality of channels, at least one write pointers is necessary. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, within the video storage and playback device of Geer et al., a write pointer that is updated each time data is stored, as taught by Shen et al., in order to provide a file management system that can efficiently implement time-shifted viewing.

10. Consider claim 4. Geer et al. teaches a controller that determines that said video data has been stored in said Nth location when said write pointer is equal to a value associated with said defined maximum size (col. 12, lines 42-67).

11. Consider claim 5. Geer et al. teaches a controller that causes said next received video data to be stored in said first location by resetting said write pointer to a value associated with said first memory location (col. 12, lines 42-67).

12. Consider claims 6 and 9. Geer et al. discloses all the claimed limitations as stated above, except that the controller updates said read pointer each time said stored

video data is retrieved from a location in said data file thus causing stored video data to be retrieved sequentially from said data file from said first location to said Nth location.

However, Shen et al. teaches that the controller is able to update said read point each time stored data is retrieved from a location causing said stored video data to be retrieved sequentially (col. 6, lines 34-37; fig. 5).

Although, Geer et al. does not distinctly disclose a read pointer, an artisan with ordinary skill in the art would readily recognize that in order to provide a data storage unit that concurrently and continuously receives a plurality of channels, at least one read pointer is necessary. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, within the video storage and playback device of Geer et al., a read pointer that is able to update each time data is retrieved, as taught by Shen et al., in order to provide a file management system that can efficiently implement time-shifted viewing.

13. Consider claim 7. Geer et al. teaches that in response to a determination that said stored video data has been retrieved from said Nth location, causes a next stored video data to be retrieved from said first location (col. 12, lines 42-67; fig. 3).

14. Consider claim 8. Geer et al. teaches that said controller uses a read pointer to cause said stored video data to be retrieved sequentially from said data file from said first location to said Nth location (col. 12, lines 42-67; fig. 3).

15. Claims 11-18 are rejected for the same reasons as discussed in the corresponding apparatus claims above.

Allowable Subject Matter

16. Claims 19-21 are allowed.

17. The following is a statement of reasons for the indication of allowable subject matter: The present invention is directed to a digital video recorder that uses a circular file management system to efficiently manage time-shifted viewing television programs. Independent claim 19 identifies the uniquely distinct features, "in response to receipt of a pause command, creating a data file having a defined maximum size on a storage disk of the digital video recorder." The closes prior art, Geer et al. (US Pat. No. 6,788,882) and Shen et al. (US Pat. No. 6,434,748), fail to anticipate or render to the above underlined limitations obvious.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mishawn N. Dunn whose telephone number is 571-272-7635. The examiner can normally be reached on Monday - Friday 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mishawn Dunn
May 3, 2006